

Work Order ID 134301

134301

Page 1

Wednesday, July 08, 2015 3:08:41 PM

Item ID: D4062-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Tank Support Assembly
 Start Date: 7/07/15 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 7/07/15 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: MCS Date: JUL 0 9 2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4062	E

100 0.00
100
 Waterjet Memo 0.00
 FLOW CNC Waterjet CUT BLANK AS PER FILE D4062-1_BLANK

(4) 0 02/15/07/23

102 QC2- Inspect parts off machine FAI/FAIB 0.00
102
 QC Memo 0.00
 Quality Control

4 0 15/09/21

105 0.00
105
 HAAS 1 Memo 0.00
 HAAS CNC vertical machine #1 MILL AS PER DWG AND FOLIO FA949
 DWG REV: E
 FOLIO REV: 11

4 0 15/09/21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐			

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Packaging

9-89/5/04/2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Work Order ID 134301***134301***

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Wednesday, July 08, 2015 3:08:41 PM

Item ID: D4062-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Tank Support Assembly
Start Date: 7/07/15 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 7/07/15 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.00

Quality Control

MCS SEP 22 2015

MCS SEP 22 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, July 08, 2015 3:08:40 PM

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Work Order ID: 134301

134301

Parent Item: D4062-041

D4062-041

Parent Item Name: Tank Support Assembly

Start Date: 7/07/15

Required Date: 7/07/15

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 11-11-23 JLM VERIFIED BY:DD
REV:B AS PER REV C 12-03-08 JLM VERIFIED BY:DD
AS PER REV D 13-07-16 JLM VERIFIED BY:DD
IPP
IPP REV:C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB1.250		Purchased	No				sf	146.3334		16			

MUHMWB1 250

UHMWB 1.250 BLACK

06/15/2015

Location

Loc Qty

Loc Code

MAT019

146.3334

m127198

146.3334

17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

DART AEROSPACE LTD		Work Order: 134301
Description: TANK Support Assembly		Part Number: 04062-041
Inspection Dwg: DY062 Rev: E		Page 1 of 1

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
31,38	$\pm 0,030$	31,380	✓		MJP-07	Tape
0,63	$\pm 0,030$	0,617	✓		MJP-04	vern
3,50	$\pm 0,030$	3,497	✓		...	...
3,66	$\pm 0,030$	3,660	✓		...	...
11,98	$\pm 0,030$	11,980	✓		↓	↓
1,50	$\pm 0,030$	1,500	✓		↓	↓
3,10	$\pm 0,030$	3,097	✓		↓	↓
4,85	$\pm 0,030$	4,850	✓		↓	↓
10,17	$\pm 0,030$	10,170	✓		MJP-07	Tape
15,49	$\pm 0,030$	15,490	✓		...	...
20,81	$\pm 0,030$	20,810	✓		↓	↓
27,65	$\pm 0,030$	27,650	✓		↓	↓
29,88	$\pm 0,030$	29,880	✓		↓	↓
0,75	$\pm 0,030$	0,750	✓		MJP-04	vern
0,38	$\pm 0,030$	0,370	✓		...	...
1,75	$\pm 0,030$	1,750	✓		↓	↓
1,75	$\pm 0,030$	1,750	✓		↓	↓
0,531	$\pm 0,008$	0,534	✓		↓	↓
0,88	$\pm 0,030$	0,870	✓		↓	↓
4,07	$\pm 0,030$	4,067	✓		↓	↓
27,30	$\pm 0,030$	27,297	✓		↓	↓
10,39	$\pm 0,030$	10,380	✓		↓	↓
6,15	$\pm 0,030$	6,140	✓		↓	↓
R1,11	$\pm 0,030$	1,220	✓		↓	↓
R0,250	$\pm 0,030$	0,250	✓		↓	↓
R0,250	$\pm 0,030$	0,250	✓		↓	↓
1,25	$\pm 0,030$	1,260	✓		↓	↓
0,13	$\pm 0,030$	0,135	✓		↓	↓
0,50	$\pm 0,030$	0,500	✓		↓	↓
0,50	$\pm 0,030$	0,496	✓		↓	↓
2,50	$\pm 0,030$	2,490	✓		↓	↓
0,375 x 50°	$\pm 0,010 \pm 0,5°$	0,365	✓		↓	↓

Measured by: <i>[Signature]</i>	Checked by: 44	QC Inspector:
Date: 15/09/21	Date: 15/09/21	Date:

Engineering Approval: (If necessary)	Date:
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Rev	Date	Change	Revised by	Approved
B	14.07.31	New Issue	KJ	

Jean-Luc Menard

From: Harvey Siemens
Sent: September-17-15 10:43 AM
To: Jean-Luc Menard
Subject: RE: wrong dimension on DWG

JL,

That difference is not significant for on-going production. Please open the necessary quality document so that we log that as a necessary drawing change.

Thanks, let me know if there's anything else that you need.

HS

From: Jean-Luc Menard
Sent: September-17-15 8:05 AM
To: Harvey Siemens <hsiemens@dartaero.com>; Colin Corbett <CCorbett@dartaero.com>
Subject: wrong dimension on DWG

Hi Colin/Harvey,

There seems to be a discrepancy between the model and dwg, dwg should be .375" instead of .300.

I guess we will have to change the dwg, let me know if you agree with me and I will attached this e-mail to the w/o for now.

THX

JL



